NEGATIVE

No clinically significant sequence or copy number variants were detected.

No pathogenic or variants of uncertain clinical significance were detected by full gene sequencing or deletion/duplication analysis for any of the genes tested in this panel.

RECOMMENDATIONS

Genetic counseling is recommended to discuss the clinical implications of this result. Genetic counselors are available for health care providers to discuss this result further at (800)345-GENE. To refer your patient for genetic counseling through Integrated Genetics, please call the scheduling line at (855) 422-2557.

ADDITIONAL INFORMATION

Indication for Testing: The indication for testing for this patient is a reported personal and/or family history of prostate cancer.

Variant Classification: Variant classification is a weighted assessment that incorporates but is not limited to the following components: prevalence of a variant in the unaffected (general) population, evidence of co-segregation in affected individuals, review of locus specific databases and observed/reported co-occurrence with other deleterious variants within the gene, published functional evidence linking a variant to phenotypes, and predicted functional impact as determined using in-silico analyses. Variants classified within each gene are reported in accordance to the ACMG standards and guidelines. Evidence affecting a variant classification that alters its clinical significance will be reported via an amended report. Pathogenic variants negatively affect normal gene function, are associated with disease, and should be used in clinical decision making. Likely pathogenic variants are strongly suggestive of normal gene function being negatively affected, and when combined with other evidence of cancer, may be used in clinical decision making. Variants of uncertain significance (VUS) have unknown effects on gene function, have not been previously reported or have been reported with inadequate or conflicting evidence regarding pathogenicity, clinical relevance, or cancer risk. A VUS should not be used in clinical decision making but additional monitoring may be considered. Likely benign variants are strongly suggestive of having no effect on gene function and are unlikely to have an increased risk for cancer. Benign variants have sufficient evidence to be considered of no clinical significance. Likely benign, benign and synonymous variants are not reported, but are available upon request.

METHODOLOGY AND LIMITATIONS

The entire gene coding regions, as well as all flanking noncoding regions, of 27 cancer genes known to be involved in the development and progression of cancers is analyzed by next generation sequencing. Flanking regions for the BRCA1 and BRCA2 genes include +/- 20bp and +/- 10bp for all other genes. Copy number variations are assessed by microarray or multiple-ligation-probe amplification assay (MLPA) to detect gene deletions and duplications. Results are reported using nomenclature recommended by the Human Genome Variation Society (HGVS http://www.hgvs.org/).
METHODOLOGY AND LIMITATIONS (cont)

Each gene sequence is interpreted independently of all other gene sequences. However, variants in different genes may sometimes interact to cause or modify a typically monogenic disease phenotype. It cannot be excluded that pathogenic variants were missed due to limitations inherent in the sequence analysis method used here. In addition, the presence of an Inherited Cancer Syndrome due to a different genetic cause can also not be ruled out. Any interpretation given here should be clinically correlated with available information about presentation and relevant family history of the patient.

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

REFERENCES


Released By: Director, PhD, Director

PERFORMING LABORATORIES

TG LabCorp RTP 1912 T.W. Alexander Drive, RTP, NC 27709-0150 Lab: (800) 345-4363 Dir: Arundhati Chatterjee, MD

For inquiries, the physician may contact the lab using the numbers indicated above.